Employment Cost Index Technical Note

The Employment Cost Index (ECI) is a quarterly index that measures the change in the cost of labor, free from the influence of employment shifts among occupations and industries. It measures that change for total compensation (wages, salaries, and employer costs for employee benefits), for wages and salaries only, and for benefit costs only.

Wages and salaries are defined as the hourly straighttime wage rate, or straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium pay for overtime and for work on weekends and holidays, shift differentials, and nonproduction bonuses such as lump-sum payments.

Benefits covered by the ECI are: Paid leave, supplemental pay, insurance benefits, retirement and savings benefits, legally required benefits, and other benefits.

The ECI provides data for the civilian economy, which includes the private economy and the public sector—excluding farms, private households, the self-employed and the Federal Government. Data are provided separately for the public and private sectors.

Each quarter, straight-time average hourly wage and salary rates and benefit cost data are collected from a probability sample. Data are collected for the pay period including the 12th day of the survey months of March, June, September, and December.

The sample establishments are classified by industry based on the 1987 Standard Industrial Classification (SIC) Manual, as defined by the U.S. Office of Management and Budget. Within an establishment, specific job categories are selected to represent broad occupational definitions. In 1996, some establishments in motor freight transportation and warehousing (SIC 42), transportation by air (SIC 45), and transportation services (SIC 47) were reclassified into air courier services (SIC 4513). These establishments were engaged in the delivery of letters, parcels, and packages, but were also operated as support establishments of enterprises that engaged in furnishing air delivery of individually addressed letters, parcels, and packages. Since the definition for SIC 4513 includes support establishments, these establishments were reclassified. For the ECI, these re-

classifications took effect in the June 1998 reference period.

Fixed employment weights are used each quarter to calculate the most aggregate indexes—civilian, private, and State and local governments. These fixed weights are also used to derive all of the industry and occupation series indexes. Since March 1995, the 1990 employment counts, primarily from the Bureau's Occupational Employment Survey, were used. From June 1986 to December 1994, employment counts from the 1980 Census were used as weights. Prior to June 1986, employment counts from the 1970 Census were used.

For the series based on bargaining status, region, and area size, employment data are not available from the Census. The employment weights are reallocated within these series each quarter based on the current ECI sample. The indexes for these series, consequently, are not strictly comparable to those for the aggregate, industry, and occupation series. A fuller explanation of the calculation of index numbers appears in the article, "Estimation Procedures for the Employment Cost Index," *Monthly Labor Review*, May 1982.

Beginning with the release of ECI data for March 1990, indexes were rebased to June 1989=100. Beginning with the release of ECI data for December 1990, seasonally adjusted data are available for selected ECI series. A description of the rebasing is available in "Employment Cost Index Rebased to June 1989," *Monthly Labor Review*, April 1990.

The costs per hour worked of compensation components, based on March data from the ECI, are published in a separate news release titled, "Employer Costs for Employee Compensation." The cost levels, which are published annually in mid-June, are calculated with current employment weights, rather than the fixed 1990 weights.

More detailed information on the ECI may be obtained by writing to the ECI, Division of Compensation Data Analysis and Planning, Bureau of Labor Statistics, 2 Massachusetts Ave. NE, Room 4175, Washington, DC 20212-0001.

Telephone: (202) 606-6199 E-mail: ocltinfo@bls.gov

Internet: http://stats.bls.gov/ecthome.htm

TABLE A-1. Employment Cost Index for total compensation¹, wages and salaries, and benefit costs by industry and occupational group, selected periods, 1996-1998

(Seasonally adjusted data)

ladada a da camada a la cama		s (June =100)			Percent c	hanges for	r 3-months	s ended—		
Industry and occupational group	June 1998	Sep. 1998	Dec. 1996	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998	June 1998	Sep. 1998
TOTAL COMPENSATION										
Civilian workersState and local government	137.3 137.5	138.7 138.6	0.7	0.7	0.8 .5	0.8	1.0	0.7	0.9	1.0
Private industry Industry	137.2	138.7	.7	.6	.9	.8	1.0	.7	.9	1.1
Goods producing ²	136.2	137.1	.7	.3	.9	.8	.4	.6	.9	.7
Construction ³	132.5	133.1	.9	.6	.8	.7	.5	.7	1.2	.5
Manufacturing	137.0	138.2	.7	.3	.8	.7	.5	.7	.5	.9
Durables	137.3	138.5	.6	.2	.8	.7	.6	.5	.6	.9
Nondurables	136.5	137.8	.7	.4	.9	.8	.5	.9	.5	1.0
Service producing ⁴	137.7	139.5	.7	.8	.8	.9	1.3	.7	.9	1.3
Transportation and public utilities ⁵	137.3	138.6	.9	.4	.7	.8	1.0	1.0	1.3	.9
Wholesale trade ³	138.3	140.8	.9	1.4	.4	.8	.5	1.8	.4	1.8
Retail trade	134.4	135.6	1.1	1.1	.7	.9	.6	1.3	.7	.9
Finance, insurance, and real										
estate ^{3,6}	138.4	141.0	6	2.1	.6	.9	3.1	1.6	1.2	1.9
Services	140.3	141.8	.6	.7	.9	1.0	1.2	.4	.8	1.1
Nonmanufacturing	137.2	138.8	.8	.8	.8	.8	1.3	.7	1.0	1.2
Occupational group										
White collar	139.3	141.1	.6	.8	.8	.9	1.3	.8	.9	1.3
Blue collar	134.1	135.1	.9	.3	.8	.8	.7	.5	.8	.7
Service	135.8	137.0	1.0	.9	.9	1.6	.5	1.0	.7	.9
WAGES AND SALARIES										
Civilian workers	135.1	136.7	.7	.8	.9	.9	1.1	.8	.9	1.2
State and local government	136.1	137.1	.8	.6	.6	.7	.8	.7	.7	.7
Private industry	134.9	136.6	.7	.9	.9	1.0	1.1	.8	1.0	1.3
Industry										
Goods producing ^{2,6}	133.2	134.3	.6	.6	1.1	.8	.5	1.1	.9	.8
Construction ³	127.9	128.2	.7	1.1	.9	.8	.6	1.0	1.3	.2
Manufacturing ⁶	134.6	136.0	.5	.5	.9	.8	.7	1.1	.7	1.0
Durables ⁶	134.5	135.9	.5	.5	.9	.8	.5	1.1	.8	1.0
Nondurables	134.7	136.1	.7	.5	.9	.8	.9	1.1	.4	1.0
Service producing ⁴	135.6	137.6	.8	.9	.9	1.1	1.4	.8	1.0	1.5
Transportation and public utilities ⁵	133.0	134.4	.8	.8	.8	.9	.8	.5	.8	1.1
Wholesale trade ³	136.8	139.3	.9	1.6	.2	.8	.5	2.2	.2	1.8
Retail trade	133.3	135.0	1.4	1.0	1.0	.9	.7	1.1	1.0	1.3
Finance, insurance, and real										
estate ^{3,6}	134.8	138.1	.0	1.9	.6	.9	3.3	1.5	1.7	2.4
Services	138.4	140.0	.6	.9	1.1	1.2	1.1	.7	.9	1.2

See footnotes at end of table.

TABLE A-1. Employment Cost Index for total compensation¹, wages and salaries, and benefit costs by industry and occupational group, selected periods, 1996-1998 — Continued

(Seasonally adjusted data)

		s (June =100)			Percent c	Percent changes for 3-months ended—						
Industry and occupational group	June 1998	Sep. 1998	Dec. 1996	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998	June 1998	Sep. 1998		
WAGES AND SALARIES-Continued												
Occupational group												
White collarBlue collar ⁶ Service	137.0 131.3 133.3	139.0 132.4 134.4	0.7 .6 1.1	0.9 .7 .9	0.9 1.0 1.0	1.1 .8 1.6	1.3 .6 .7	0.9 .9 1.0	1.0 .8 .9	1.5 .8 .8		
BENEFIT COSTS												
Civilian workers	142.7 140.6 143.2	143.8 142.0 144.2	.6 .7 .6	.3 .4 .1	.5 .3 .6	.5 .3 .5	.8 .3 .9	.4 .8 .3	.8 .7 .8	.8 1.0 .7		
Industry												
Goods producing ²	142.3 142.2	143.0 142.7	.9 .9	1 3	.6 .8	.6 .5	.2 .4	3 4	.6 .5	.5 .4		
Service producing ⁴	143.7	144.9	.4	.4	.6	.5	1.4	.6	.8	.8		
Nonmanufacturing	143.9	145.0	.5	.4	.6	.5	1.1	.6	1.0	.8		
Occupational group												
White collar	145.5 140.3 143.7	146.4 140.9 144.8	.6 .7 .8	.4 .1 .8	.5 .4 .9	.3 .6 1.4	1.4 .2 .2	.5 .1 1.1	.7 .8 .2	.6 .4 .8		

Internet site (http://stats.bls.gov/ecthome.htm). All series will continue to be

¹ Includes wages, salaries, and employer costs for employee benefits.
2 Includes mining, construction, and manufacturing.
3 Average standard errors (SE) for the unadjusted series upon which this series is based exceeded 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SE's for estimates in the publication (excluding easynally adjusted series) will be available on the publication (excluding seasonally adjusted series) will be available on the

Internet site (http://stats.bls.gov/ecthome.htm). All series will continue to be published until further notice.

4 Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

5 Estimates for transportation and public utilities reflect the changes in SIC coding. See Technical Notes for further information.

6 No identifiable seasonality was found for this series.

TABLE A-2. Employment Cost Index for total compensation¹ for civilian and State and local government workers by industry and occupational group, selected periods, 1997-1998

	Indexes	(June 19	89=100)		P	ercent cha	anges for-	_	
Industry and occupational group	Can		Com	3 m	onths end	ed-	12 n	nonths end	ded-
	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998
Civilian workers	134.1 134.2	137.4 137.4	139.0 138.8	1.0 .9	0.8 .7	1.2 1.0	3.0 2.8	3.5 3.3	3.7 3.4
Industry									
Goods producing ² Manufacturing Service producing ³ Services Health services Hospitals Educational services Public administration ⁴ Nonmanufacturing Occupational group White collar Excluding sales Professional specialty and technical Executive, administrative, and managerial Administrative support, including clerical Blue collar Service	133.6 134.6 134.2 136.5 136.7 135.6 136.5 134.1 133.8 135.2 135.6 135.8 135.8 135.8 135.8 135.8	136.3 137.2 137.7 139.0 138.5 138.2 137.7 137.4 137.3 138.7 138.9 138.3 139.7 139.3 134.3 137.9	137.2 138.2 139.6 140.8 139.1 139.4 140.2 138.9 139.0 140.6 140.6 140.0 141.7 140.4 135.3 139.4	.7 .6 1.0 1.2 .7 .7 1.7 .8 1.0	.9 .6 .7 .5 .4 .8 .1 .7 .8 .8 .7 .6 .6 .4 .9 .8	.7 .7 1.4 1.3 .4 .9 1.8 1.1 1.2 1.4 1.2 1.4 .8 .7	2.7 2.5 3.1 3.0 1.9 1.5 2.5 2.6 3.1 3.0 2.8 2.4 3.2 2.9 2.7 3.8	2.7 2.5 3.6 3.0 2.1 2.7 2.6 3.3 3.6 3.4 2.7 4.3 3.5 2.6 3.9	2.7 2.7 4.0 3.2 1.8 2.8 2.7 3.6 3.9 4.0 3.7 3.1 4.7 3.4 2.7 3.6
State and local government	135.0	136.9	139.0	1.3	.3	1.5	2.4	2.7	3.0
Industry									
Services Excluding schools ^{5,6} Health services Hospitals Educational services Schools Elementary and secondary Colleges and universities Public administration ⁴	135.4 134.4 136.0 136.3 135.4 135.7 135.5 136.3 134.1	136.6 136.2 138.0 138.4 136.5 136.7 136.2 138.1 137.4	139.0 138.7 140.3 140.7 138.8 139.1 138.8 140.1 138.9	1.6 1.1 .8 .8 1.7 1.6 1.7 1.6	.1 .1 .0 .1 .1 .1 .1	1.8 1.8 1.7 1.7 1.7 1.8 1.9 1.4	2.3 1.9 1.5 1.6 2.3 2.3 2.2 2.9 2.6	2.5 2.5 2.3 2.4 2.5 2.4 2.2 3.0 3.3	2.7 3.2 3.2 3.2 2.5 2.5 2.4 2.8 3.6
Occupational group									
White collar	134.8 134.6 135.6 135.3 133.3 137.0	136.2 135.6 137.9 137.2 135.2 141.0	138.4 137.7 140.4 139.5 136.8 143.0	1.4 1.6 .9 1.3 .8 1.0	.1 .0 .3 .2 .1	1.6 1.5 1.8 1.7 1.2	2.3 2.3 2.7 2.7 2.3 2.5	2.4 2.3 2.6 2.8 2.2 4.0	2.7 2.3 3.5 3.1 2.6 4.4

¹ Includes wages, salaries, and employer costs for employee benefits.
2 Includes mining, construction, and manufacturing.

Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; service industries; and

public administration.

4 Includes executive, legislative, judicial, administrative, and regulatory activities of State and local governments, SIC's 91 through 96.

 $[\]ensuremath{\overset{5}{\circ}}$ Formerly called hospitals and other services.

⁶ Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (http://stats.bls.gov/ecthome.htm). All series will continue to be published until further notice.

TABLE A-3. Employment Cost Index for total compensation¹ for private industry workers, by industry and occupational group, selected periods, 1997-1998

	Indexes	s (June 19	89=100)		F	ercent cha	anges for-	_	
Industry and occupational group				3 m	onths end	ed-	12 n	nonths end	ded-
middsity and occupational group	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998
Private industry workers	133.9 134.1	137.5 137.5	139.0 138.8	0.8 .8	0.9 .8	1.1 .9	3.2 3.0	3.5 3.4	3.8 3.5
Industry									
Goods producing ²	133.6	136.2	137.1	.7	.8	.7	2.7	2.6	2.6
Excluding sales	133.1	135.6	136.5	.6	.8	.7	2.5	2.5	2.6
White collar	135.6	138.8	139.7	.6	.8	.6	2.6	3.0	3.0
Excluding sales	134.5	137.4	138.3	.5	.8	.7	2.3	2.7	2.8
Blue collar	132.4	134.6	135.5	.8	.8	.7	2.7	2.4	2.3
Construction ³	129.7	132.7	133.4	.8	1.6	.5	3.0	3.1	2.9
Manufacturing	134.6	137.2	138.2	.6	.6	.7	2.5	2.5	2.7
White collar	135.8	139.1	140.1	.4	.7	.7	2.3	2.9	3.2
Excluding sales	134.5	137.3	138.3	.5	.6	.7	2.0	2.6	2.8
Blue collar	133.7	135.9	136.8	.7	.7	.7	2.7	2.3	2.3
Durables	135.0	137.4	138.5	.7	.7	.8	2.4	2.5	2.6
Aircraft manufacturing (SIC 3721)	137.8	138.9	139.3	4	1.2	.3	3	.4	1.1
White collar	134.6	137.1	137.4	2	1.8	.2	.6	1.6	2.1
Blue collar	141.8	140.1	140.8	7	.4	.5	-1.8	-1.9	7
Nondurables	133.7	136.7	137.6	.5	.6	.7	2.8	2.8	2.9
Service producing ⁴	133.8	137.8	139.6	1.0	.8	1.3	3.3	4.0	4.3
Excluding sales	134.5	138.5	140.0	.9	.8	1.1	3.2	3.9	4.1
White collar	134.9	139.3	141.2	.9	.9	1.4	3.3	4.2	4.7
Excluding sales	136.3	140.6	142.2	.9	.8	1.1	3.1	4.1	4.3
Blue collar	130.0	133.2	134.3	.6	.8	.8	2.8	3.1	3.3
Service	132.7	135.8	137.0	1.6	.6	.9	4.4	4.0	3.2
Transportation and public utilities ⁵	132.9	137.1	138.5	.9	1.0	1.0	2.8	4.1	4.2
Transportation ^{3,5}	132.1	134.9	136.7	.9	.7	1.3	3.0	3.1	3.5
Public utilities	133.7	139.7	140.7	.9	1.3	.7	2.5	5.4	5.2
Communications	131.8	139.2	140.5	1.0	1.9	.9	2.1	6.7	6.6
Electric, gas, and sanitary services	136.0	140.3	141.0	.8	.5	.5	3.0	4.0	3.7
Wholesale and retail trade	132.4	135.8	137.6	.9	.8	1.3	3.8	3.5	3.9
Excluding sales	133.0	136.3	138.1	.8	.6	1.3	3.9	3.3	3.8
Wholesale trade ³	134.6	138.6	140.8	.6	.7	1.6	3.6	3.6	4.6
Excluding sales	134.5	138.2	140.0	.6	.9	1.3	3.5	3.4	4.1
Retail trade	131.1	134.4	135.9	1.1	1.0	1.1	3.9	3.6	3.7
General merchandise stores ³	128.6	133.0	133.2	.7	1.4	.2	3.2	4.2	3.6
Food stores ³	129.8	132.9	133.7	1.2	1.2	.6	2.2	3.7	3.0
Finance, insurance, and real estate ³	130.5	138.4	141.0	.9	1.2	1.9	3.0	7.0	8.0
Excluding sales	133.5	141.3	143.2	.8	.8	1.3	2.9	6.7	7.3
Banking, savings and loan, and other		l .							
credit agencies ³	133.1	145.3	148.4	1.1	1.4	2.1	2.1	10.4	11.5
Insurance ³	133.1	138.9	141.9	.8	1.1	2.2	2.9	5.1	6.6
Excluding sales	137.4	140.9	141.6	.6	.6	.5	3.0	3.1	3.1
Services	137.0	140.3	141.8	1.0	.7	1.1	3.2	3.4	3.5
Business services ³	136.3	140.7	143.5	1.6	.9	2.0	4.7	4.8	5.3
Health services	137.0	138.7	139.0	.8	.4	.2	2.1	2.1	1.5
Hospitals	135.4	138.2	139.1	.7	1.1	.7	1.5	2.8	2.7
Nursing homes	-	_	_	.6	.8	1.0	2.7	3.0	3.3
Educational services	141.6	143.9	147.0	2.0	.3	2.2	3.0	3.7	3.8
Colleges and universities	142.5	144.8	147.8	1.9	.3	2.1	2.8	3.5	3.7

See footnotes at end of table.

TABLE A-3. Employment Cost Index for total compensation¹ for private industry workers, by industry and occupational group, selected periods, 1997-1998 — Continued

	Indexes	(June 19	39=100)		F	ercent ch	anges for-	_	
Industry and occupational group	Sep.	June	Com	3 m	onths end	ed-	12 n	nonths end	ded-
	1997	1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998
Industry-Continued									
Nonmanufacturing industries	133.3	137.2	138.9	0.9	0.9	1.2	3.3	3.9	4.2
White collar	134.9	139.2	141.1	1.0	.9	1.4	3.4	4.2	4.6
Excluding sales	136.2	140.5	142.0	.8	.9	1.1	3.1	4.0	4.3
Blue collar	129.4	132.4	133.4	.6	1.1	.8	2.8	3.0	3.1
Service	132.7	135.7	136.9	1.7	.6	.9	4.5	4.0	3.2
Occupational group									
White collar	135.2	139.4	141.1	.8	.9	1.2	3.1	4.0	4.4
Excluding sales	135.9	139.9	141.3	.8	.8	1.0	3.0	3.8	4.0
Professional specialty and technical	136.7	140.1	141.6	.6	.9	1.1	2.6	3.1	3.6
Executive, administrative, and managerial	135.2	140.0	141.9	1.0	.4	1.4	3.3	4.6	5.0
Sales ³	132.2	137.3	140.4	1.1	1.5	2.3	4.3	5.0	6.2
Administrative support, including	. 02.2							0.0	0.2
clerical	135.9	139.6	140.6	.9	1.0	.7	3.0	3.6	3.5
Blue collar	131.7	134.3	135.2	.7	.9	.7	2.8	2.7	2.7
Precision production, craft, and repair	131.7	134.4	135.4	.6	1.1	.7	2.7	2.7	2.8
Machine operators, assemblers, and	101.7	104.4	100.4			.,	2.,	2.,	2.0
inspectors	132.2	134.7	135.7	.8	.8	.7	2.7	2.7	2.6
Transportation and material moving	128.0	129.9	130.7	.9	.5	.6	2.5	2.4	2.1
Handlers, equipment cleaners, helpers, and	120.0	125.5	150.7	.5		.0	2.0	2.4	2.1
laborers	134.2	137.6	138.5	.6	.4	.7	3.2	3.1	3.2
100000	104.2	137.0	100.0	.0		.,	0.2	0.1	5.2
Service	133.1	136.0	137.3	1.7	.5	1.0	4.5	3.9	3.2
Production and nonsupervisory									
occupations ⁶	133.2	136.6	138.0	.8	1.0	1.0	3.1	3.4	3.6

 $[\]stackrel{1}{\circ}$ Includes wages, salaries, and employer costs for employee benefits.

NOTE: Dashes indicate data not available.

² Includes mining, construction, and manufacturing.

³ Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (http://stats.bls.gov/ecthome.htm). All series will continue to be published until further notice.

⁴ Includes transportation, communications, and public utilities; wholesale

and retail trade; finance, insurance, and real estate; and service industries. 5 Estimates for transportation and public utilities reflect the changes in

SIC coding. See Technical Notes for further information.

6 This series has the same industry and occupational coverage as the Hourly Earnings Index, which was discontinued in January 1989.

TABLE A-4. Employment Cost Index for total compensation¹ for private industry workers, by bargaining status, region, and area, selected periods, 1997-1998

	Indexes	(June 19	39=100)		Р	ercent cha	anges for-	-	
Bargaining status, region, and area	•			3 m	onths end	ed-	12 m	nonths end	ded-
	Sep.	June	Sep.	Sep.	June	Sep.	Sep.	June	Sep.
	1997	1998	1998	1997	1998	1998	1997	1998	1998
Bargaining status									
Union	133.2	135.3	136.8	1.1	1.0	1.1	2.4	2.7	2.7
	131.2	133.3	134.6	1.0	1.1	1.0	2.3	2.6	2.6
Goods-producing industries ²	132.3	134.3	135.6	.8	1.2	1.0	2.4	2.4	2.5
	134.0	136.2	138.0	1.2	.7	1.3	2.3	2.9	3.0
Manufacturing	133.0	134.6	136.0	1.0	.7	1.0	2.5	2.2	2.3
	132.6	134.2	135.5	.9	.8	1.0	2.4	2.1	2.2
	132.9	135.3	136.9	1.1	1.0	1.2	2.3	2.9	3.0
Nonunion Blue-collar occupations	133.9	137.8	139.3	.8	.8	1.1	3.2	3.8	4.0
	131.8	134.7	135.5	.5	.7	.6	3.1	2.7	2.8
Goods-producing industries ²	134.0	136.9	137.7	.6	.7	.6	2.8	2.8	2.8
Service-producing industries ³	133.7	138.0	139.7	.9	1.0	1.2	3.5	4.2	4.5
Manufacturing	135.1	138.0	138.9	.5	.6	.7	2.6	2.7	2.8
	134.2	136.7	137.4	.5	.5	.5	3.0	2.4	2.4
	133.4	137.5	139.1	.9	.9	1.2	3.5	4.0	4.3
Region ⁴									
Northeast	134.0	137.0	138.7	.7	.7	1.2	2.6	2.9	3.5
	132.5	136.4	137.6	.8	.7	.9	2.9	3.7	3.8
	136.2	139.6	140.9	1.1	.9	.9	3.7	3.6	3.5
	132.5	136.6	138.5	.8	1.0	1.4	3.3	4.0	4.5
Area									
MetropolitanOther	133.9	137.5	139.1	.8	.8	1.2	3.0	3.5	3.9
	133.8	137.1	138.2	1.1	.9	.8	4.0	3.5	3.3

¹ Includes wages, salaries, and employer costs for employee benefits.

Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

NOTE: The indexes for these series are not strictly comparable to those for the aggregate, occupation, and industry series.

² Includes mining, construction, and manufacturing.

³ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries

industries.

⁴ The regional coverage is as follows: Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland,

TABLE A-5. Employment Cost Index for wages and salaries for civilian and State and local government workers, by industry and occupational group, selected periods, 1997-1998

	Indexes	(June 19	89=100)		P	ercent ch	anges for-	_	
Industry and occupational group	0	lua a	Com	3 m	onths end	ed-	12 n	nonths end	ded-
	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998
Civilian workers	131.6 131.7	135.0 134.9	136.8 136.6	1.2 1.2	0.7 .7	1.3 1.3	3.5 3.3	3.8 3.6	4.0 3.7
Industry									
Goods producing¹ Manufacturing Service producing² Services Health services Hospitals Educational services Public administration³ Nonmanufacturing Occupational group White collar Excluding sales Professional specialty and technical Executive, administrative, and managerial Administrative support, including clerical Blue collar Service	129.9 131.3 132.2 134.8 134.3 132.5 135.3 130.3 131.5 133.0 133.5 134.0 133.5 132.7 128.4 131.5	133.3 134.6 135.7 137.6 136.5 135.1 136.5 133.2 135.1 136.7 137.0 136.6 138.3 136.2 131.4 134.5	134.4 136.0 137.8 139.6 137.6 136.4 139.1 134.8 137.0 138.8 138.8 138.5 140.5 137.5 132.6 136.1	.8 .8 1.2 1.4 .9 .8 2.0 1.0 1.2	1.0 .7 .7 .5 .2 .7 .1 .4 .8 .8 .7 .6 .7 .9 .8	.8 1.0 1.5 1.5 .8 1.0 1.9 1.2 1.4 1.5 1.3 1.4 1.6 1.0 .9 1.2	3.0 2.8 3.5 3.5 2.7 1.9 2.8 2.9 3.5 3.4 3.2 2.9 3.5 3.3 3.1 4.2	3.4 3.3 3.9 3.5 2.6 2.7 2.9 3.3 3.9 4.0 3.8 3.3 4.8 3.7 3.1 4.0	3.5 3.6 4.2 3.6 2.5 2.9 2.8 3.5 4.2 4.4 4.0 3.4 5.2 3.6 3.3 3.5
State and local government	133.6	135.4	137.6	1.6	.2	1.6	2.7	3.0	3.0
Industry									
Services Excluding schools ^{4,5} Health services Hospitals Educational services Schools Elementary and secondary Colleges and universities Public administration ³	134.7 133.3 133.9 133.7 134.8 134.9 135.3 133.6 130.3	135.9 135.5 136.5 136.5 135.8 136.0 136.1 135.5 133.2	138.4 137.8 138.7 138.6 138.4 138.5 138.7 137.7 134.8	1.9 1.3 1.0 1.0 2.0 2.0 2.0 1.7 1.0	.1 .1 .1 .1 .1 .1 .1 .2	1.8 1.7 1.6 1.5 1.9 1.8 1.9 1.6	2.7 2.5 2.1 2.1 2.7 2.7 2.5 2.9 2.9	2.8 3.0 2.9 3.1 2.7 2.8 2.6 3.1 3.3	2.7 3.4 3.6 3.7 2.7 2.7 2.5 3.1 3.5
Occupational group									
White collar	133.7 134.4 133.1 131.4 131.2 134.2	135.2 135.6 135.6 133.3 133.5 137.2	137.6 137.9 138.0 135.4 135.1 139.2	1.7 1.8 1.1 1.5 1.1	.1 .1 .4 .2 .3	1.8 1.7 1.8 1.6 1.2 1.5	2.6 2.5 2.9 2.9 2.6 3.2	2.8 2.7 3.0 2.9 2.9 3.6	2.9 2.6 3.7 3.0 3.0 3.7

 $^{\mbox{\scriptsize 5}}$ Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (http://stats.bls.gov/ecthome.htm). All series will continue to be published until further notice.

Includes mining, construction, and manufacturing.
 Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; service industries; and

public administration.

3 Includes executive, legislative, judicial, administrative, and regulatory activities of State and local governments, SIC's 91 through 96.

4 Formerly called hospitals and other services.

TABLE A-6. Employment Cost Index for wages and salaries for private industry workers by industry and occupational group, selected periods, 1997-1998

	Indexes	s (June 19	89=100)		F	ercent cha	anges for-	_	
Industry and occupational group				3 m	onths end	ed-	12 n	nonths end	ded-
madsity and decapational group	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998
Private industry workers Excluding sales occupations	131.0 131.2	134.9 134.8	136.6 136.3	1.0 1.0	0.9 .8	1.3 1.1	3.6 3.5	4.0 3.8	4.3 3.9
Industry									
Goods producing ¹	129.9	133.2	134.3	.8	.9	.8	3.0	3.3	3.4
Excluding sales	129.3	132.5	133.6	.8	.9	.8	2.9	3.3	3.3
White collar	132.3	136.3	137.4	.7	1.0	.8	2.9	3.7	3.9
Excluding sales	130.9	134.6	135.7	.7	1.0	.8	2.5	3.5	3.7
Blue collar	128.4	131.3	132.3	.9	.9	.8	3.1	3.1	3.0
Construction ²	124.7	128.1	128.5	.9	1.7	.3	3.6	3.6	3.0
Manufacturing	131.3	134.6	136.0	.8	.7	1.0	2.8	3.3	3.6
White collar	132.8	136.8	138.3	.7	.9	1.1	2.5	3.7	4.1
Excluding sales	131.3	135.0	136.3	.6	.9	1.0	2.3	3.4	3.8
Blue collar	130.2	133.1	134.3	.8	.6	.9	3.1	3.0	3.1
Durables	131.2	134.5	135.9	.8	.8	1.0	2.7	3.4	3.6
Aircraft manufacturing (SIC 3721)	133.3	136.9	137.2	1	1.3	.2	2.1	2.5	2.9
White collar	129.3	133.7	133.9	2	1.9	.1	2.5	3.2	3.6
Blue collar	138.4	140.5	141.0	3	.3	.4	1.0	1.2	1.9
Nondurables	131.4	134.9	136.0	.6	.5	.8	3.0	3.3	3.5
Service producing ³	131.5	135.6	137.6	1.1	.9	1.5	3.8	4.2	4.6
Excluding sales	132.3	136.2	137.9	1.1	.7	1.2	3.7	4.0	4.2
White collar	132.6	137.0	139.2	1.1	1.0	1.6	3.8	4.4	5.0
Excluding sales	134.2	138.4	140.2	1.1	.8	1.3	3.6	4.3	4.5
Blue collar	127.9	131.1	132.4	.6	.7	1.0	3.3	3.1	3.5
Service	129.8	133.0	134.2	1.8	.7	.9	4.7	4.3	3.4
Transportation and public utilities ⁴	130.1	132.8	134.3	1.0	.5	1.1	3.3	3.1	3.2
Transportation ^{2,4}	128.5	130.4	132.4	1.3	.2	1.5	3.8	2.8	3.0
Public utilities	132.0	135.7	136.5	.8	.9	.6	2.8	3.7	3.4
Communications	131.8	135.8	136.7	.9	1.0	.7	2.8	4.0	3.7
Electric, gas, and sanitary services	132.2	135.6	136.3	.8	.7	.5	2.9	3.4	3.1
Wholesale and retail trade	130.9	134.6	136.6	.9	1.0	1.5	4.1	3.8	4.4
Excluding sales	132.2	135.6	137.6	.8	.7	1.5	4.5	3.4	4.1
Wholesale trade ²	133.0	137.1	139.3	.6	.7	1.6	3.5	3.7	4.7
Excluding sales	133.9	137.8	139.6	.8	1.0	1.3	3.9	3.8	4.3
Retail trade	129.9	133.3	135.2	1.1	1.1	1.4	4.4	3.7	4.1
General merchandise stores ²	126.7	131.5	132.2	.4	1.6	.5	3.3	4.2	4.3
Food stores ²	126.7	130.5	131.7	1.6	1.2	.9	2.9	4.7	3.9
Finance, insurance, and real estate ²	126.4	134.8	138.1	.9	1.7	2.4	3.4	7.6	9.3
Excluding sales	129.3	137.5	139.7	.9	1.2	1.6	2.6	7.3	8.0
Banking, savings and loan, and other									
credit agencies ²	128.9	143.2	147.0	1.7	1.6	2.7	1.7	12.9	14.0
Insurance ²	128.7	134.8	138.7	.5	1.3	2.9	2.6	5.3	7.8
Excluding sales	132.9	135.7	136.6	.5	.7	.7	2.8	2.6	2.8
Services	134.7	138.3	140.0	1.3	.8	1.2	3.9	4.0	3.9
Business services ²	134.9	139.2	141.8	1.9	1.2	1.9	5.0	5.1	5.1
Health services	134.3	136.5	137.5	.8	.2	.7	2.7	2.5	2.4
Hospitals	132.2	134.7	135.8	.8	.8	.8	1.9	2.7	2.7
Nursing homes	_	_	_	.8	.8	1.0	3.3	3.7	3.9
Educational services	137.8	139.6	142.8	2.2	.4	2.3	3.4	3.6	3.6
Colleges and universities	137.8	139.7	142.8	2.1	.4	2.2	3.3	3.5	3.6

See footnotes at end of table.

TABLE A-6. Employment Cost Index for wages and salaries for private industry workers by industry and occupational group, selected periods, 1997-1998 — Continued

	Indexes	(June 19	39=100)		F	ercent cha	anges for-	_	
Industry and occupational group	0	June	0	3 m	onths end	ed-	12 n	nonths end	ded-
, , , , , ,	Sep. 1997	1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998
Industry-Continued									
Nonmanufacturing industries	130.7	134.7	136.5	1.1	1.0	1.3	3.8	4.2	4.4
White collar	132.4	136.8	138.9	1.1	1.0	1.5	3.8	4.4	4.9
Excluding sales	133.8	138.1	139.8	1.1	.9	1.2	3.6	4.3	4.5
Blue collar	126.4	129.5	130.5	.7	1.0	.8	3.3	3.2	3.2
Service	129.7	132.9	134.1	1.8	.7	.9	4.7	4.3	3.4
Occupational group									
White collar	132.7	137.0	139.0	1.1	1.0	1.5	3.7	4.3	4.7
Excluding sales	133.4	137.5	139.1	1.1	.9	1.2	3.4	4.2	4.3
Professional specialty and technical	133.7	137.1	138.7	1.0	.9	1.2	3.2	3.5	3.7
Executive, administrative, and managerial	133.6	138.7	140.9	1.1	.7	1.6	3.6	5.0	5.5
Sales ²	129.8	135.2	138.8	1.2	1.6	2.7	4.8	5.4	6.9
Administrative support, including									
clerical	132.9	136.7	137.9	.9	1.0	.9	3.4	3.8	3.8
Blue collar	128.3	131.3	132.4	.8	.8	.8	3.2	3.1	3.2
Precision production, craft, and repair	128.2	131.2	132.3	.6	1.1	.8	3.2	3.0	3.2
Machine operators, assemblers, and									
inspectors	129.5	132.7	133.8	.8	.8	.8	3.3	3.3	3.3
Transportation and material moving	124.1	126.4	127.6	.9	.4	.9	2.6	2.8	2.8
Handlers, equipment cleaners, helpers, and									
laborers	130.2	133.7	135.1	.7	.4	1.0	3.5	3.4	3.8
Service	129.9	133.0	134.4	1.8	.7	1.1	4.7	4.2	3.5
Production and nonsupervisory									
occupations ⁵	130.1	133.6	135.2	1.0	1.0	1.2	3.6	3.7	3.9

¹ Includes mining, construction, and manufacturing.

NOTE: Dashes indicate data not available.

² Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (http://stats.bls.gov/ecthome.htm). All series will continue to be published until further notice.

3 Includes transportation, communications, and public utilities; wholesale

and retail trade; finance, insurance, and real estate; and service industries.

⁴ Estimates for transportation and public utilities reflect the changes in SIC coding. See Technical Notes for further information. $^{5}\,$ This series has the same industry and occupational coverage as the

Hourly Earnings Index, which was discontinued in January 1989. Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

TABLE A-7. Employment Cost Index for wages and salaries for private industry workers by bargaining status, region, and area, selected periods, 1997-1998

	Indexes	(June 19	89=100)		Р	ercent cha	anges for-	_	
Bargaining status, region, and area	•			3 m	onths end	ed-	12 m	nonths end	ded-
	Sep.	June	Sep.	Sep.	June	Sep.	Sep.	June	Sep.
	1997	1998	1998	1997	1998	1998	1997	1998	1998
Bargaining status									
Union	128.3	130.7	132.4	1.1	0.8	1.3	2.8	3.0	3.2
	126.0	128.5	129.9	1.0	1.0	1.1	2.6	3.0	3.1
Goods-producing industries ¹	126.6	129.4	131.0	1.0	1.2	1.2	2.8	3.2	3.5
Service-producing industries ²	130.4	132.2	134.1	1.2	.3	1.4	2.8	2.6	2.8
Manufacturing	127.8	130.4	132.2	1.0	.6	1.4	2.7	3.1	3.4
	127.6	130.0	131.4	1.1	.8	1.1	2.7	3.0	3.0
	128.6	130.8	132.4	1.2	.9	1.2	3.0	2.9	3.0
Nonunion	131.6	135.7	137.4	1.0	.9	1.3	3.7	4.1	4.4
	129.7	132.9	134.0	.6	.7	.8	3.6	3.1	3.3
Goods-producing industries ¹	131.2	134.7	135.7	.8	.8	.7	3.1	3.5	3.4
Service-producing industries ²	131.6	135.9	137.9	1.1	1.0	1.5	3.9	4.4	4.8
Manufacturing Blue-collar occupations Nonmanufacturing	132.6	136.2	137.3	.7	.8	.8	3.0	3.4	3.5
	132.0	135.1	136.2	.6	.5	.8	3.3	3.0	3.2
	131.1	135.3	137.1	1.1	1.0	1.3	4.0	4.3	4.6
Region ³									
Northeast	130.7	133.8	135.4	.7	.9	1.2	2.9	3.1	3.6
	130.6	134.9	136.5	.9	.7	1.2	3.7	4.3	4.5
	132.2	136.0	137.5	1.4	1.0	1.1	4.2	4.3	4.0
	130.2	134.5	136.7	1.0	1.2	1.6	3.5	4.3	5.0
Area									
MetropolitanOther	131.1	135.1	136.9	.9	1.0	1.3	3.5	4.0	4.4
	130.4	133.4	134.7	1.2	.7	1.0	4.3	3.6	3.3

¹ Includes mining, construction, and manufacturing.

Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and West-Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

NOTE: The indexes for these series are not strictly comparable to those for the aggregate, occupation, and industry series.

² Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

The regional coverage is as follows: Northeast—Connecticut, Maine,

Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South-Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland,

TABLE A-8. Employment Cost Index for benefits for civilian, State and local government, and private industry workers by industry, occupational group, and bargaining status, selected periods, 1997-1998

	Indexes	(June 19	89=100)		F	ercent ch	anges for-	_		
Industry, occupational group, and	0		0	3 m	onths end	ed-	12 months ended-			
bargaining status	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998	Sep. 1997	June 1998	Sep. 1998	
Civilian workers	140.3 138.2 140.8	143.0 140.3 143.7	144.0 142.1 144.5	0.5 .6 .5	0.7 .4 .8	0.7 1.3 .6	1.9 1.5 2.0	2.4 2.1 2.6	2.6 2.8 2.6	
Industry										
Goods producing ¹ Service producing ²	141.5 139.8	142.5 143.8	143.0 144.9	.4 .4	.7 .8	.4 .8	1.9 1.9	1.1 3.3	1.1 3.6	
Manufacturing	141.4 147.6 146.8 148.2 140.2	142.4 143.1 145.0 139.5 143.9	142.6 143.8 145.5 140.7 145.0	.3 8 3 -1.5	.5 1.0 1.5 .4	.1 .5 .3 .9	1.9 -4.7 -3.5 -6.4 2.0	1.0 -3.8 -1.6 -7.2 3.2	.8 -2.6 9 -5.1 3.4	
Occupational group										
White collar Blue collar Service ³	142.0 138.8 141.4	145.6 140.4 143.7	146.6 141.0 144.7	.4 .6 1.3	.6 .9 .3	.7 .4 .7	1.8 1.9 3.8	2.9 1.7 2.9	3.2 1.6 2.3	
Bargaining status										
Union Nonunion	142.2 140.2	143.8 143.4	145.0 144.2	.9 .4	1.2 .6	.8 .6	1.6 2.0	2.1 2.6	2.0 2.9	

 $[\]begin{array}{c} 1 \\ 2 \\ \text{Includes mining, construction, and manufacturing.} \end{array}$ wholesale and retail trade; finance, insurance, and real estate; and service industries.

³ Average standard errors (SE) for the series exceed 0.3 percent for 3-month changes and 0.6 percent for 12-month changes for the five years ending December 1996. To assist users in ascertaining the reliability of the series, SE's for estimates in this publication (excluding seasonally adjusted series) will be available on the Internet site (http://stats.bls.gov/ecthome.htm). All series will continue to be published until further notice.